

## Studies Find Northeast Mercury Hotspots

*January 10, 2007 — By Philip Elliott, Associated Press*

CONCORD, N.H. -- Mercury levels near some coal-burning power plants are five times higher than previous government estimates, calling into question how the Environmental Protection Agency identifies biological hotspots and prompting a Maine senator to propose a national monitoring system.

At least five sites in the Northeast are mercury hotspots, including upper Connecticut River reservoirs and the lower Merrimack River watershed, according to a pair of studies published Tuesday in the journal *BioScience*. Mercury, a neurological toxin, has accumulated to unhealthy levels in fish and birds in the region and poses a threat to humans — particularly pregnant women and children — who eat them.

"These studies clearly demonstrate biological mercury hotspots do exist," said Charles Driscoll, a professor of civil and environmental engineering at Syracuse University and one of the studies' authors. "We feel the New Hampshire case study is extremely important because it links local emissions to a hotspot in the adjacent area."

The study showed high levels in southern New Hampshire, downwind from Public Service Company of New Hampshire's coal-burning plant in Bow.

Scientists also measured unhealthy mercury levels miles away in Moore, Comerford and McIndoes reservoirs on the upper Connecticut River. They also cited Maine's upper Androscoggin and Kennebec river watersheds, which include Flagstaff, Aziscohos, Mooselookmeguntic, Richardson and Rangeley lakes and Lake Umbagog in Maine and New Hampshire.

They also pointed to sites in New York's Adirondacks and in Nova Scotia as confirmed hotspots.

Researchers identified another nine locations in the northeast as suspected hotspots based on original research samples collected from common loon and yellow perch.

Mercury from coal-fired power plants and other sources is absorbed through the environment, concentrating as it moves upward in the food chain. Researchers said the greatest threat to humans comes from eating the fish. In 44 states, residents face varying forms of consumption advisories.

The new studies also point to reservoir manipulation — raising and lowering the water level for power production — as a source of mercury threats.

"The action of the reservoirs, the drawdown and the flooding, allow for high production of methylmercury, and that methylmercury is what concentrates," Driscoll said. Methylmercury is a form of mercury released through pollution and can be toxic.

In response, Republican Sen. Susan Collins of Maine renewed her plan for a 90 percent reduction in mercury emissions. She also is developing legislation for a national monitoring system.

"I have long-argued that EPA used faulty science in order to justify an insufficient mercury rule, and these studies prove it," Collins said. "EPA misrepresented the mercury problem based on computer data which had not been peer-reviewed, and then put out a rule which does not account for mercury hotspots and which places children and pregnant women at risk."

The Bush administration has begun a plan to reduce plant mercury emissions by 70 percent by 2025. But the effort allows plants to buy emissions credits from cleaner plants instead of reducing their own mercury output.

The study concludes the policy might not have its intended overall reduction if high-pollution plants are not required to reduce emissions.

The EPA defended its record.

"Under the Bush administration, the U.S. is the first nation in the world to regulate mercury emissions from coal-fired power plants," said Jessica Emond, EPA's deputy press secretary. "EPA is currently working to establish a coordinated, nationwide network of atmospheric mercury monitoring sites for estimating dry deposition."

*Source: Associated Press*